**PRELIMINARY AMENDMENT**
Applicant: Mark L. Yoseloff., et al.
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Title: VIDEO GAMING APPARATUS FOR WAGERING WITH UNIVERSAL COMPUTERIZED CONTROLLER AND I/O INTERFACE FOR UNIQUE ARCHITECTURE

Docket No.: PA0368.ap.US
Examiner: S. Ashburn
Group Art Unit: 3713

## IN THE CLAIMS

**STATUS OF claims 1-17 and 19-37 is shown below. No claim amendments are proposed in this response.**

1. (PREVIOUSLY AMENDED) A computerized wagering game apparatus, comprising:

a computerized game controller operable to control a computerized wagering game;

a video display and/or slot display device providing a visual representation of a signal provided by the computerized game controller such that the video display device displays at least one visual image selected from the group consisting of

a) computerized wagering game status information and

b) symbol elements that change with the play of the wagering game;

a communication port communicatively coupled to the computerized game controller;

an interface assembly communicatively coupled to the communication port, the interface assembly comprising one or more user interface devices having interface formats supported by the interface assembly and a universal controller that can control gaming systems via an I/O interface;

an I/O interface adapter configured to communicatively couple the interface assembly to the communication port and convert at least some signals between the interface formats supported by the interface assembly and the universal controller;

the computerized game controller monitoring through the interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless events and

at least one connector on the interface assembly capable of being connected to gaming peripherals so that the computerized gaming controller can communicate with the gaming peripherals.

2. (ORIGINAL) The computerized wagering game apparatus of claim 1 wherein the game controller is an IBM PC-compatible computer system.

3. (PREVIOUSLY AMENDED) The computerized gaming apparatus of claim 1 wherein the communication port is selected from the group consisting of a PC serial port, PC parallel port, and a USB port and the at least some signals are converted by converting signals from one voltage level to another, inverting signals, multiplexing or decoding signals, or converting signals between formats supported by the various interface assemblies and the universal computerized game controller.

4. (PREVIOUSLY AMENDED) The computerized wagering game apparatus of claim 1 wherein at least one of the user interface devices are selected from the group consisting of buttons, slot machine arms, touch screen coordinates and joy sticks and the universal controller performs functions necessary to convert signals between formats supported by various interface assemblies selected from the group consisting of encoding signals, converting signals from one voltage level to another, invert signals, multiplex or decode signals and the universal computerized game controller.

5. (ORIGINAL) The computerized wagering game apparatus of claim 1 wherein at least one of the user interface devices comprises a credit management device.

6. (ORIGINAL) The computerized wagering game apparatus of claim 5 wherein the credit management device is selected from the group consisting of coin acceptors, coin recognition systems, currency acceptors, currency recognition systems, credit card readers, and smart card readers.

7. (ORIGINAL) The computerized wagering game apparatus of claim 1 wherein at least one of the user interface devices comprises a security device.

8. (ORIGINAL) The computerized wagering game apparatus of claim 7 wherein at least one of the security devices is selected from the group consisting of tilt switches, device integrity switches, and spurious electrical discharge detectors.

9. (PREVIOISLY AMENDED) A method for reconfiguring a computerized wagering game apparatus having a wiring harness for associating a computerized game controller with output devices in the apparatus, the method comprising:

a) removing an original special-purpose computerized game controller used to control a computerized wagering game from the apparatus, the original computerized game controller designed to and capable of working exclusively with a particular computerized wagering game apparatus and at least some interface devices on the apparatus, the peripherals having been connected to the original computerized game controller through a wiring harness that is not removed when the original special-purpose computerized game controller is removed;

b) inserting a universal computerized game controller operable to control a video wagering game and/or slot wagering game that can be played on the video and/or slot wagering game apparatus, the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless events and the I/O interface assembly that operatively couples the universal computerized game controller to user interface devices of the wagering game apparatus, the I/O interface assembly comprising an adapter configured to communicatively couple the I/O interface assembly to the communication port and a) convert at least some signals between the interface formats supported by the interface assembly and the universal controller and/or b) the I/O interface assembly having digital logic to perform at least one function selected from the group consisting of buffering and latching signals; and

c) sending signals from the computerized game controller through the I/O interface and harness to communicate between the computerized game controller and the at least some user interface devices, communication to the at least some user interface devices performed through the wiring harness that was not removed.

10. (ORIGINAL) The method of claim 9 wherein after said sending signals, the video and/or slot gaming apparatus enables a video and/or slot display device associated with the video and/or slot wagering game apparatus to provide a visual representation of a signal provided by the computerized game controller such that the video and/or slot display device displays at least one

visual image selected from the group consisting of a) computerized wagering game status information and b) symbol elements that change with the play of the wagering game.

11. (ORIGINAL) The method of claim 9, wherein the universal computerized game apparatus is an IBM PC-compatible computer system.

12. (PREVIOUSLY AMENDED) The method of claim 9, wherein the I/O interface is operatively coupled to a communication port selected from the group consisting of a PC serial port, a PC parallel port, and a USB port and the at least some signals are converted by converting signals from one voltage level to another, inverting signals, multiplexing or decoding signals, or converting signals between formats supported by the various interface assemblies and the universal computerized game controller.

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13. (ORIGINAL) The method of claim 9, wherein at least one of the user interface devices is selected from the group consisting of buttons, slot machine arms, touch screen coordinates and joy sticks.

14. (PREVIOUSLY AMENDED) The method of claim 9, wherein the I/O interface has digital logic to perform at least one function selected from the group consisting of buffering, latching signals.

15. (PREVIOUSLY AMENDED) The method of claim 14, wherein at least one of the user interface devices comprises a credit management device, and the credit management device is selected from the group consisting of coin acceptors, coin recognition systems, currency acceptors, currency recognition systems, credit card readers, and smart card readers.

16. (ORIGINAL) The method of claim 9, wherein at least one of the user interface devices comprises a security device.

17. (ORIGINAL) The method of claim 16, wherein at least one of the security devices is selected from the group consisting of tilt switches, device integrity switches, and spurious electrical discharge detectors.

18. (CANCELLED)

19. (PREVIOUSLY AMENDED) A computerized wagering game apparatus, comprising:

a universal computerized game controller operable to control a computerized wagering game;

a video and/or slot display device providing a visual representation of a signal provided by the universal computerized game controller such that the video and/or slot display device displays at least one visual image selected from the group consisting of

a) computerized wagering game status information and

b) symbol elements that change with the play of the wagering game;

a communication port communicatively coupled to the computerized game controller, the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless events;

the I/O interface assembly comprising one or more user interface devices; and

an I/O interface adapter on the I/O interface assembly configured to communicatively couple the interface assembly to the communication port, the I/O interface adapter configured to communicatively couple the interface assembly to the communication port and a) convert at least some signals between the interface formats supported by the interface assembly and the universal controller and/or b) the I/O interface assembly having digital logic to perform at least one function selected from the group consisting of buffering and latching signals.

20. (ORIGINAL) The device of claim 1 wherein the computerized game apparatus comprises an embedded mother board.

21. (ORIGINAL) The method of claim 9 wherein the universal computerized game controller is an embedded mother board.

22. (PREVIOUSLY AMENDED) A universal video and/or slot wagering gaming controller comprising:

a pin connector for attachment to a video and/or slot wagering gaming apparatus comprising a computerized game controller, the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event;

a connector to a circuit board;

the circuit board having controls for peripherals in the gaming apparatus which can be executed by a computer;

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an I/O interface assembly between said wagering gaming controller and the pin connector, the I/O interface assembly comprising an adapter configured to communicatively couple the interface assembly to the communication port and a) convert at least some signals between the interface formats supported by the interface assembly and the universal controller and/or b) the I/O interface assembly having digital logic to perform at least one function selected from the group consisting of buffering and latching signals; and

the circuit board having a port to connect the controls for peripherals to a computer within the gaming apparatus.

23. (ORIGINAL) The universal gaming controller of claim 22 wherein the peripherals include at least one function selected from the group consisting of button controls, coin acceptors, touch screen coordinates, credit managers, currency acceptors, operating system, security devices, game operating code and a store of images.

24. (ORIGINAL) The universal gaming controller of claim 22 wherein the port is connected to a computer to execute the controls for peripherals.

25. (ORIGINAL) The universal gaming controller of claim 23 wherein the port is connected to a computer to execute the controls for peripherals.

26. (ORIGINAL) The universal gaming controller of claim 22 wherein the gaming apparatus is a video gaming apparatus.

27. (PREVIOUSLY AMENDED) A computerized wagering game apparatus, comprising:

a computerized game controller operable to control a computerized wagering game, the controller including at least a random number generator to randomly determine outcomes, and the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event;

a video display device providing a visual representation of a signal provided by the computerized game controller such that the video display device displays at least one visual image selected from the group consisting of

a) computerized wagering game status information and

b) symbol elements that change with the play of the wagering game;

a communication port communicatively coupled to the computerized game controller and at least some user interface devices on the apparatus, the at least some user interface devices having been connected to the computerized game controller;

the I/O interface assembly comprising the at least some user interface devices; and

an I/O interface adapter on the I/O interface assembly configured to communicatively couple the I/O interface assembly to the communication port and to the at least some user interface devices, the I/O interface adapter configured to communicatively couple the interface assembly to the communication port and a) convert at least some signals between the interface formats supported by the interface assembly and the universal controller and/or b) the I/O interface assembly having digital logic to perform at least one function selected from the group consisting of buffering and latching signals.

28. (PREVIOUSLY AMENDED) An I/O interface adapter for a wagering gaming apparatus comprising an I/O interface adapter configured to communicatively couple the interface

assembly to a communication port on a computerized wagering game controller and a) convert at least some signals between the interface formats supported by the interface assembly and the universal controller and/or b) the I/O interface adaptor associated with an I/O interface assembly having digital logic to perform at least one function selected from the group consisting of buffering and latching signals, the I/O interface adapter configured to operatively couple an interface assembly to a communication port which is in turn operatively coupled to a computerized video and/or slot wagering game controller comprising nonvolatile storage with instructions stored thereon, the instructions when executed operable to cause the computer to execute a wagering game, including at least a random number generator to determine random outcomes, the wagering game controlled by the wagering game controller via the user interface assembly, and the computerized game controller monitoring through the I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event.

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a) removing an original special-purpose computerized game controller used to control a computerized wagering game from the apparatus, the original computerized game controller designed to and capable of working exclusively with a particular computerized wagering game apparatus, while leaving peripheral devices within the computerized wagering game apparatus;

b) inserting a universal computerized game controller, the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event operable to control a video and/or slot wagering game that can be played on the video and/or slot wagering game apparatus and the I/O interface assembly comprising and interface adapter that operatively couples the universal computerized game controller to user interface devices of the wagering game apparatus, the universal computerized game controller comprising at least a random number generator; and

c) sending signals from the computerized game controller through the I/O interface assembly and harness to communicate between the computerized game controller and operate the user interface devices, the I/O interface adapter configured to communicatively couple the

interface assembly to the communication port and a) convert at least some signals between the interface formats supported by the interface assembly and the universal controller and/or b) the I/O interface assembly having digital logic to perform at least one function selected from the group consisting of buffering and latching signals.

30. (ORIGINAL) The method of claim 29 wherein the peripherals includes at least one peripheral selected from the group consisting of button controls, coin acceptors, touch screen coordinates, credit managers, currency acceptors, operating system, security devices, game operating code and a store of images.

31. (PREVIOUSLY AMENDED) A computerized wagering game apparatus, comprising:

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a computerized game controller operable to control a computerized wagering game, the controller including at least a random number generator to randomly determine outcomes and a pay table identifying payouts based upon the occurrence of random events;

a video and/or slot display device providing a visual representation of a signal provided by the computerized game controller such that the display device displays at least one visual image selected from the group consisting of

a) computerized wagering game status information and

b) symbol elements that change with the play of the wagering game;

a communication port communicatively coupled to the computerized game controller, the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event;

a interface assembly comprising one or more user interface devices; and

the I/O interface assembly comprising and interface adapter configured to communicatively couple the interface assembly to the communication port, the I/O interface adapter configured to communicatively couple the interface assembly to the communication port and a) convert at least some signals between the interface formats supported by the interface assembly and the universal controller and/or b) the I/O interface assembly having digital logic to perform at least one function selected from the group consisting of buffering and latching signals.

32. (PREVIOUSLY AMENDED) An I/O interface adapter configured to operatively couple an interface assembly to a communication port operatively coupled to a computerized video and/or slot wagering game controller comprising nonvolatile storage with instructions stored thereon, the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event, the instructions when executed operable to cause the computerized game controller to execute a video and/or slot wagering game, including at least a random number generator to determine random outcomes, controlled via the user interface assembly and a pay table to define payouts for a random event, the interface assembly having the I/O interface having digital logic to perform at least one function selected from the group consisting of buffering, latching signals and converting signals between protocols, and the computerized game controller monitoring through the I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event.

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33. (PREVIOUSLY AMENDED) A computerized wagering game apparatus, comprising:

a computerized game controller operable to control a computerized wagering game;

a video display and/or slot display device providing a visual representation of a signal provided by the computerized game controller such that the video display device displays at least one visual image selected from the group consisting of

c) computerized wagering game status information and

d) symbol elements that change with the play of the wagering game;

a communication port communicatively coupled to the computerized game controller, the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event;

the I/O interface assembly comprising one or more user interface devices; and

an I/O interface adapter on the I/O interface assembly configured to communicatively couple the interface assembly to the communication port and only convert signals, the I/O interface adapter configured to communicatively couple the interface assembly to the communication port and a) convert at least some signals between the interface formats supported by the interface assembly and the universal controller and/or b) the I/O interface assembly

having digital logic to perform at least one function selected from the group consisting of buffering and latching signals.

34. (PREVIOUSLY ADDED) A method for reconfiguring a computerized wagering game apparatus having a harness for associating a computerized game controller with output devices in the apparatus, the method comprising:

a) removing an original special-purpose computerized game controller used to control a computerized wagering game from the apparatus, the original computerized game controller designed to and capable of working exclusively with a particular computerized wagering game apparatus and at least some interface devices on the apparatus, the peripherals having been connected to the original computerized game controller through a connector;

b) inserting a universal computerized game controller operable to control a video wagering game and/or slot wagering game that can be played on the video and/or slot wagering game apparatus and an I/O interface adapter on an I/O interface assembly that operatively couples the universal computerized game controller to user interface devices of the wagering game apparatus, the I/O interface adapter configured to communicatively couple the interface assembly to the communication port and i) convert at least some signals between the interface formats supported by the interface assembly and the universal controller; ii) the I/O interface assembly having digital logic to perform at least one function selected from the group consisting of buffering and latching signals; and/or iii) encode signals, convert signals from one voltage level to another, invert signals, multiplex signals or decode signals;

the computerized game controller monitoring through an I/O interface assembly conditions of coins in/out, currency in/out, debt/credit, and cashless event, and

c) sending signals from the computerized game controller through the I/O interface assembly and harness to communicate between the computerized game controller and the at least some user interface devices, communication to the at least some user interface devices performed through the connector.

35. (PREVIOUSLY ADDED) The method of claim 34 wherein after said sending signals, the video and/or slot gaming apparatus enables a video and/or slot display device associated with the

video and/or slot wagering game apparatus to provide a visual representation of a signal provided by the computerized game controller such that the video and/or slot display device displays at least one visual image selected from the group consisting of a) computerized wagering game status information and b) symbol elements that change with the play of the wagering game.

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36. (PREVIOUSLY ADDED) The method of claim 34 wherein the I/O interface adapter has digital logic to convert signals between protocols.

37. (PREVIOUSLY ADDED) The method of claim 35 wherein the I/O interface adapter has digital logic to convert signals between protocols.

## STATUS OF THE REJECTIONS

1. Claims 1-17 and 19-37 have been rejected under 35 U.S.C. 103(a) as being unpatentable (obvious) over Hedrick (U.S. Patent No. 6,135,884) in View of RTD USA (www.rtdusa.com) and Mardsen et al. (*Development of PC-Windows Based Universal Control System*)

In the only rejection of record, it is asserted that Hedrick et al. teach:

a) A retrofittable wagering game apparatus;

b) a game controller comprised of general purpose computer components;

c) desirability of a gaming machine to be easily modified with new games or features;

d) video display devices showing at least one image selected from (i) computerized wagering status, (ii) symbol elements that change during play of the wagering game;

e) communications port;

f) interface assembly comprising one or more interface devices;

g) I/O adapter to communicatively couple interfaces and convert signals between formats;

h) communication port to peripherals; and

i) a computerized game controller monitoring through a communication port at least one of coins in/out, currency in/out, debits/credits and cashless events.

The rejection asserts that Hedrick et al. do not teach

> "an interface assembly communicatively coupled to the controller's communication port wherein the interface assembly provides [a] plurality of interface formats such that the controller can control systems via the I/O interfaces and includes a connector for connecting to peripherals." (Page 3, lines 13-18)

It is asserted, without specific teachings from references, that the entire quoted text would have been obvious. This argument is supported by Examiner's comments bridging pages 3-4 and an

assertion that the arguments are supported or shown by RTD. That assertion and the arguments are in error.

It is further asserted that Mardsen et al. "suggests that a universal controller would benefit a wide range of commercial applications" and therefore should be used in the gaming apparatus of Hedrick.